Complete Summary

GUIDELINE TITLE

Appendicitis.

BIBLIOGRAPHIC SOURCE(S)

Appendicitis. Philadelphia (PA): Intracorp; 2005. Various p. [17 references]

GUIDELINE STATUS

This is the current release of the guideline.

All Intracorp guidelines are reviewed annually and updated as necessary, but no less frequently than every 2 years. This guideline is effective from April 1, 2005 to April 1, 2007.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Appendicitis, including simple or complicated (abscess, rupture, peritonitis) acute and chronic

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Pediatrics
Surgery

INTENDED USERS

Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Utilization Management

GUIDELINE OBJECTIVE(S)

To present recommendations for the diagnosis and management of acute appendicitis that will assist medical management leaders to make appropriate benefit coverage determinations

TARGET POPULATION

Adults and children with appendicitis

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Physical examination and assessment of signs and symptoms
2. Diagnostic tests:
    - Complete blood count (CBC)
    - Ultrasonography
    - Helical computed tomography (CT)
    - Colonoscopy
    - Diagnostic laparotomy, if indicated

Treatment/Management

1. Appendectomy with intravenous (IV) antibiotics
2. IV antibiotics and observation followed by elective appendectomy 6 weeks to 3 months later in patients with walled-off abscess in the right lower quadrant

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Searches were performed of the following resources: reviews by independent medical technology assessment vendors (such as the Cochrane Library, HAYES); PubMed; MD Consult; the Centers for Disease Control and Prevention (CDC); the U.S. Food and Drug Administration (FDA); professional society position statements and recommended guidelines; peer reviewed medical and technology publications and journals; medical journals by specialty; National Library of Medicine; Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services; and Federal and State Jurisdictional mandates.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

A draft Clinical Resource Tool (CRT or guideline) is prepared by a primary researcher and presented to the Medical Technology Assessment Committee or the Intracorp Guideline Quality Committee, dependent upon guideline product type.

The Medical Technology Assessment Committee is the governing body for the assessment of emerging and evolving technology. This Committee is comprised of

a Medical Technology Assessment Medical Director, the Benefit and Coverage Medical Director, CIGNA Pharmacy, physicians from across the enterprise, the Clinical Resource Unit staff, Legal Department, Operations, and Quality. The Intracorp Guideline Quality Committee is similarly staffed by Senior and Associate Disability Medical Directors.

Revisions are suggested and considered. A vote is taken for acceptance or denial of the CRT.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnostic Confirmation

Subjective Findings

- Pain initially is diffusely centered in the umbilical area.
- Usually within 4 to 6 hours, the pain localizes in the lower right quadrant.
- Loss of appetite
- Vomiting occurs in about 75% of patients, but is usually not prominent.
    - Symptomatic of lower intestinal obstruction

Objective Findings

- Temperature elevation is rarely more than 1 degree Celsius.
- Pulse is normal or slightly elevated.
- Anorexia nearly always accompanies appendicitis.
- Abdominal tenderness is present and is often maximal at or near right-lower quadrant (RLQ).
    - RLQ may also be called McBurney's point.
- Rebound tenderness may be present.

- Child with acute appendicitis may demonstrate preferred body position for comfort:
    - Bent forward at waist
    - Leg on painful side flexed and rotated at the hip

Diagnostic Tests

- Complete blood count (CBC)
    - White blood cell (WBCs) count is typically elevated; 10,000 to 20,000/mm^3
- The efficacy of radiologic studies in the diagnosis of acute appendicitis is unclear: gaining support as diagnostic adjuncts
    - Ultrasonography
    - Helical computed tomography (CT)
- Colonoscopy may be helpful, particularly in elderly (age greater than 65 years) with diffuse symptoms.
- Diagnostic laparotomy sometimes used, particularly in cases of anatomical variation.
    - Pelvic (or rectal) appendicitis
    - Left-sided appendicitis

Differential Diagnosis

- Acute gastroenteritis
- Cholecystitis
- Pyelonephritis (see the Intracorp guideline for Pyelonephritis)
- Salpingitis
- Tubo-ovarian abscess
- Ruptured ovarian cyst
- Ectopic pregnancy
- Pelvic inflammatory disease (see the Intracorp guideline for Pelvic Inflammatory disease)
- Intussusception (in young children)
- Epididymitis
- Testicular torsion

Treatment Options

- Appendectomy with intravenous (IV) antibiotics is the appropriate management for patients with acute appendicitis.
- Uncommonly, a patient will present later and have a walled-off abscess in the right lower quadrant; these may be treated with IV antibiotics/observation followed by elective appendectomy 6 weeks to 3 months later.

Duration of Medical Treatment

- Medical - Optimal: 7 day(s), Maximal: 21 day(s)
- Surgical - Optimal: 7 day(s), Maximal: 42 day(s)

Additional information regarding primary care visit schedules, referral options, and specialty care, is provided in the original guideline document.

The original guideline document also provides a list of red flags that may affect disability duration, and return to work goals, including

- After uncomplicated appendectomy
- After appendectomy with perforation or other complication

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis and management of appendicitis that assist medical management leaders to make appropriate benefit coverage determinations

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Timeliness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1997 (revised 2005)

GUIDELINE DEVELOPER(S)

Intracorp - Public For Profit Organization

SOURCE(S) OF FUNDING

Intracorp

GUIDELINE COMMITTEE

CIGNA Clinical Resources Unit (CRU)
Intracorp Disability Clinical Advisory Team (DCAT)
Medical Technology Assessment Committee (MTAC)
Intracorp Guideline Quality Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

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Reprints of complete guideline content may be purchased for $35.00 per title (plus tax in TX at 8.25% and CT at 1.0%). Please send e-mail request to lbowman@mail.intracorp.com.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Policies and procedures. Medical Technology Assessment Committee Review Process. Philadelphia (PA): Intracorp; 2004. 4 p.
- Online guideline user trial. Register for Claims Toolbox access at www.intracorp.com.

Licensing information and pricing: Available from Intracorp, 1601 Chestnut Street, TL-09C, Philadelphia, PA 19192; e-mail: lbowman@mail.intracorp.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on May 27, 2005. The information was verified by the guideline developer on June 7, 2005.

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Readers with questions regarding guideline content are directed to contact the guideline developer.

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